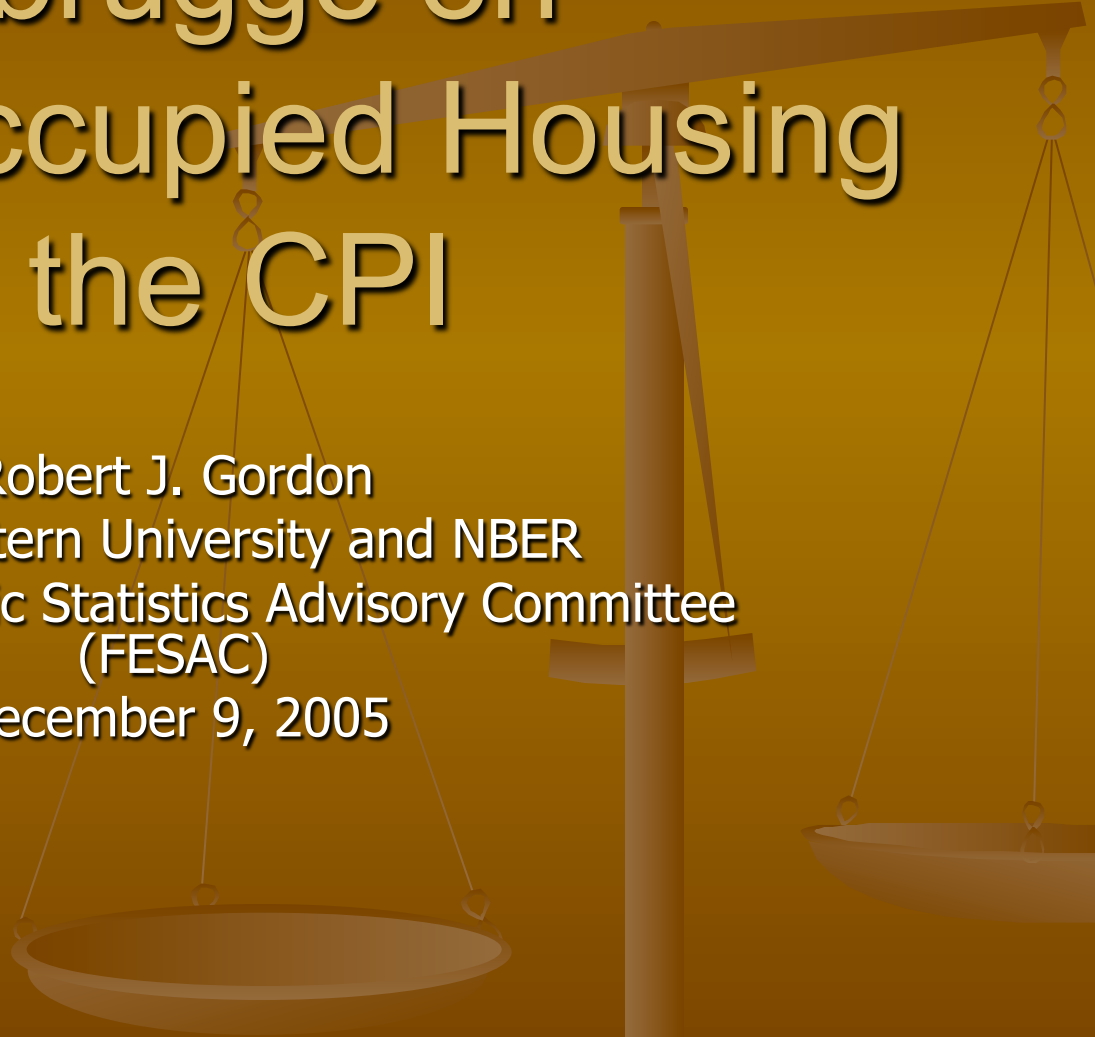
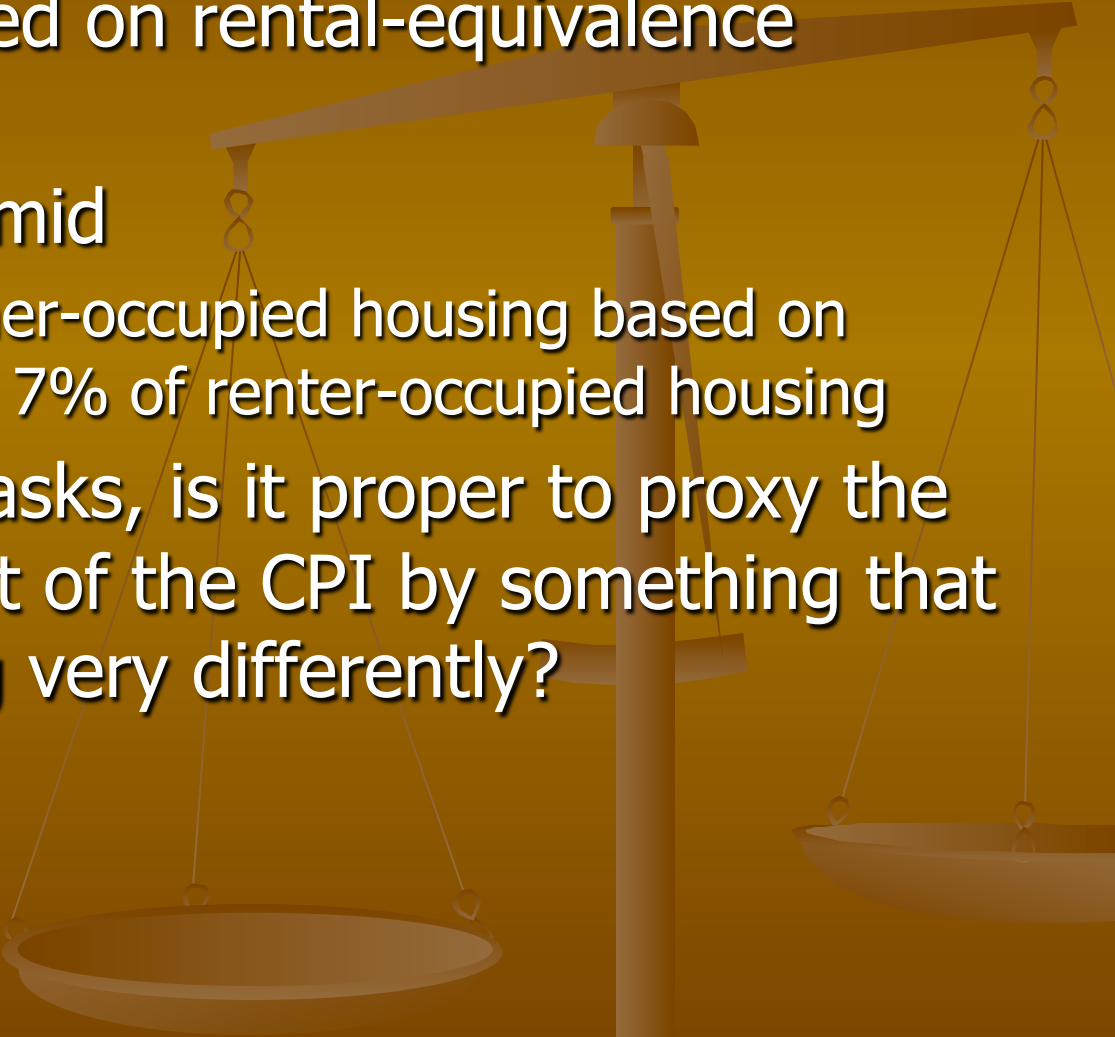


# Discussion of Poole-Placek- Verbrugge on Owner-Occupied Housing in the CPI



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Federal Economic Statistics Advisory Committee  
(FESAC)  
December 9, 2005

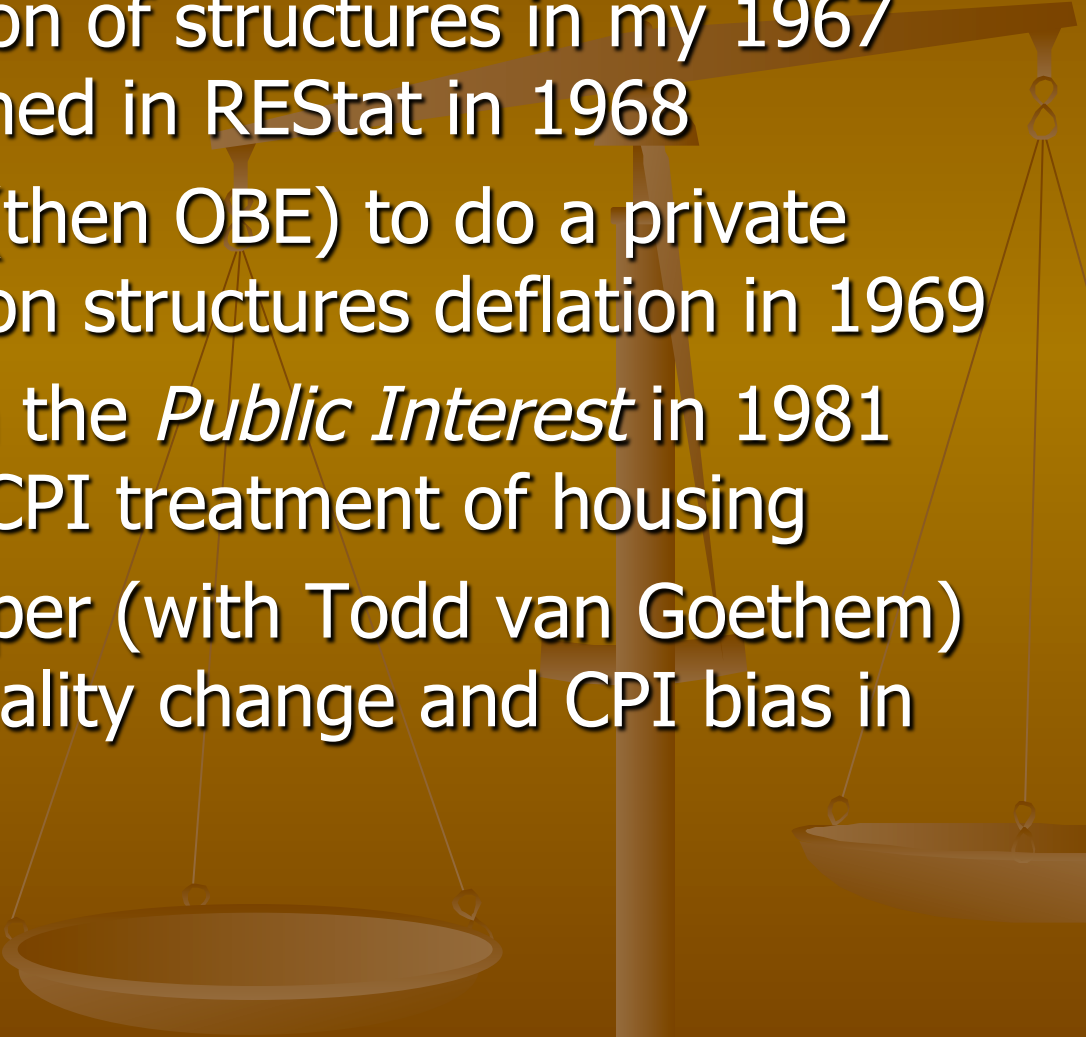
# Wide-Ranging Contribution on an Important Topic

- 30% of CPI is based on rental-equivalence indexes
  - Upside-down pyramid
    - 23% of CPI is owner-occupied housing based on indexes that cover 7% of renter-occupied housing
  - The paper rightly asks, is it proper to proxy the biggest component of the CPI by something that might be behaving very differently?
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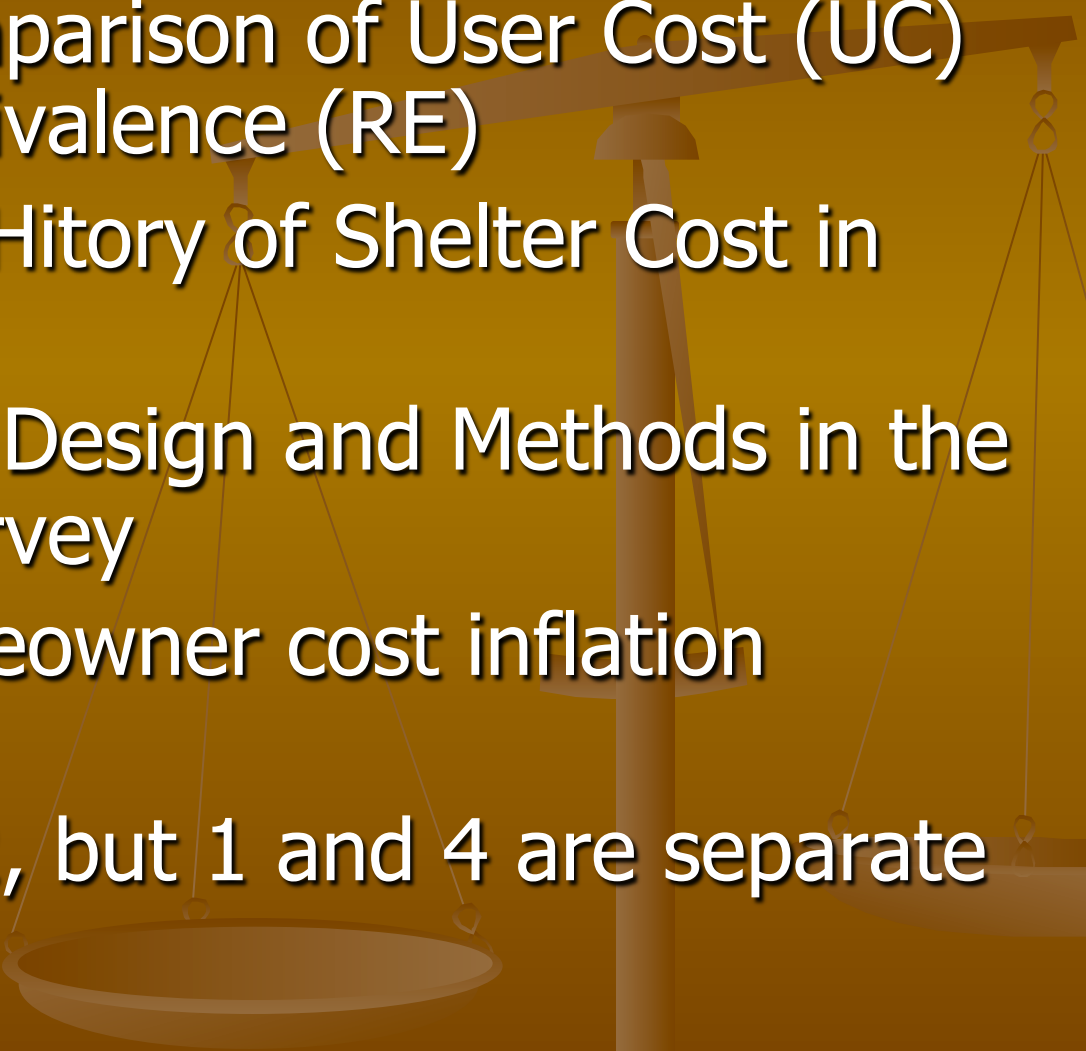
# Background

- Authors (pp. 40-42) coin a new acronym “GvG” for my recent paper, the first time I’ve ever been called a palindrome
- I’ll reciprocate by calling them PPV
- You called in the right guy
  - Home-owner since 1968. Turned a \$15K down payment into multi-millions of home equity, negative user cost (didn’t every professor my age do that, nothing special?)
  - Landlord since 1996. I understand why rents are persistent, change with tenant turnover, and how utilities and maintenance work (6 tenants in 9 yrs)

# Other Background (for the young folks)

- Chapter on deflation of structures in my 1967 PhD thesis, published in REStat in 1968
  - Hired by the BEA (then OBE) to do a private consultant report on structures deflation in 1969
  - Wrote an article in the *Public Interest* in 1981 about the absurd CPI treatment of housing
  - Wrote the GvG paper (with Todd van Goethem) on a century of quality change and CPI bias in rental housing
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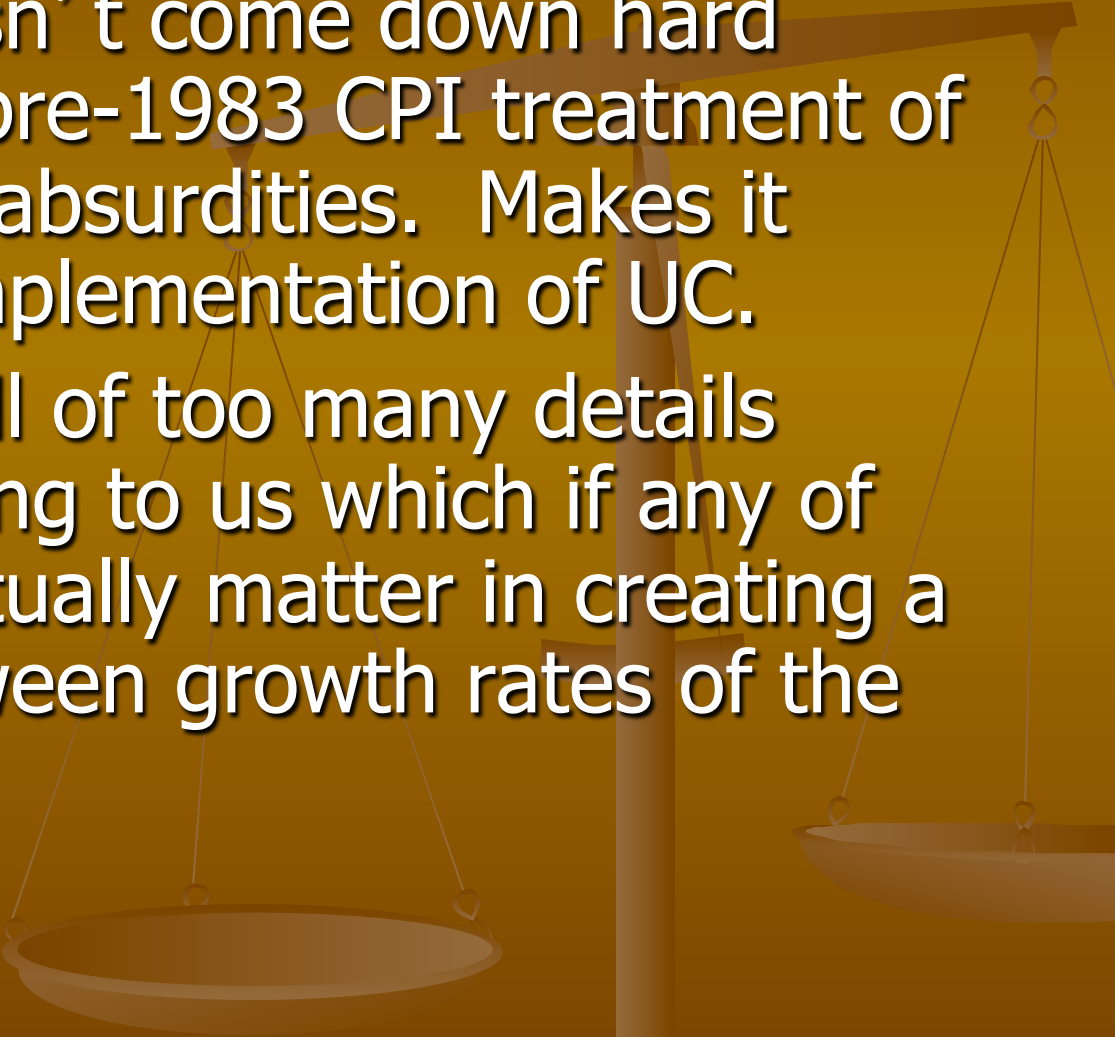
# This Paper has Four Sections, Only Partly Connected

- Conceptual Comparison of User Cost (UC) with Rental Equivalence (RE)
  - Methodological History of Shelter Cost in CPI
  - Current Sample Design and Methods in the CPI Housing Survey
  - Survey of “homeowner cost inflation measures”
  - 3 follows from 2, but 1 and 4 are separate
- 

# A quick reaction to each section, then more extended comments

- #1, user cost (UC) vs. rental equiv (RE)
- I agree completely that UC is too volatile, too hard to measure, and if implemented would make the CPI useless
  - Hard to measure? Doesn't even mention AMT!
- I recommend the second paper sent to us as background by Verbrugge
  - He can't find any connection between RE and UC
  - He concludes this makes RE hopeless as a proxy for UC, while I would conclude the opposite (that UC is hopeless as a proxy for RE)

# Sections #2 and #3 on the history of methodology

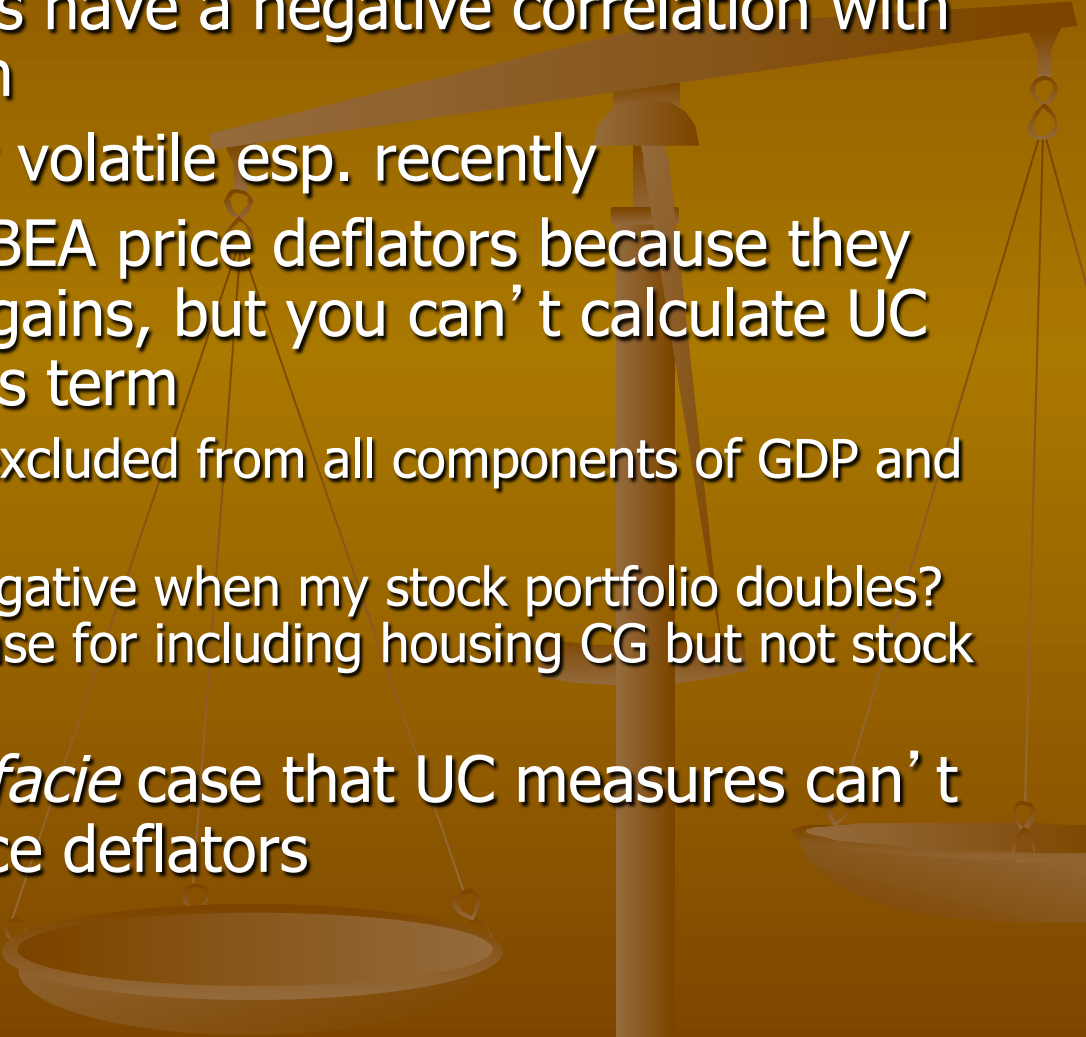
- Section #2 doesn't come down hard enough on the pre-1983 CPI treatment of housing and its absurdities. Makes it sound like an implementation of UC.
  - Section #3 is full of too many details without explaining to us which if any of these details actually matter in creating a divergence between growth rates of the ultimate index
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# Section #4, the survey of other work

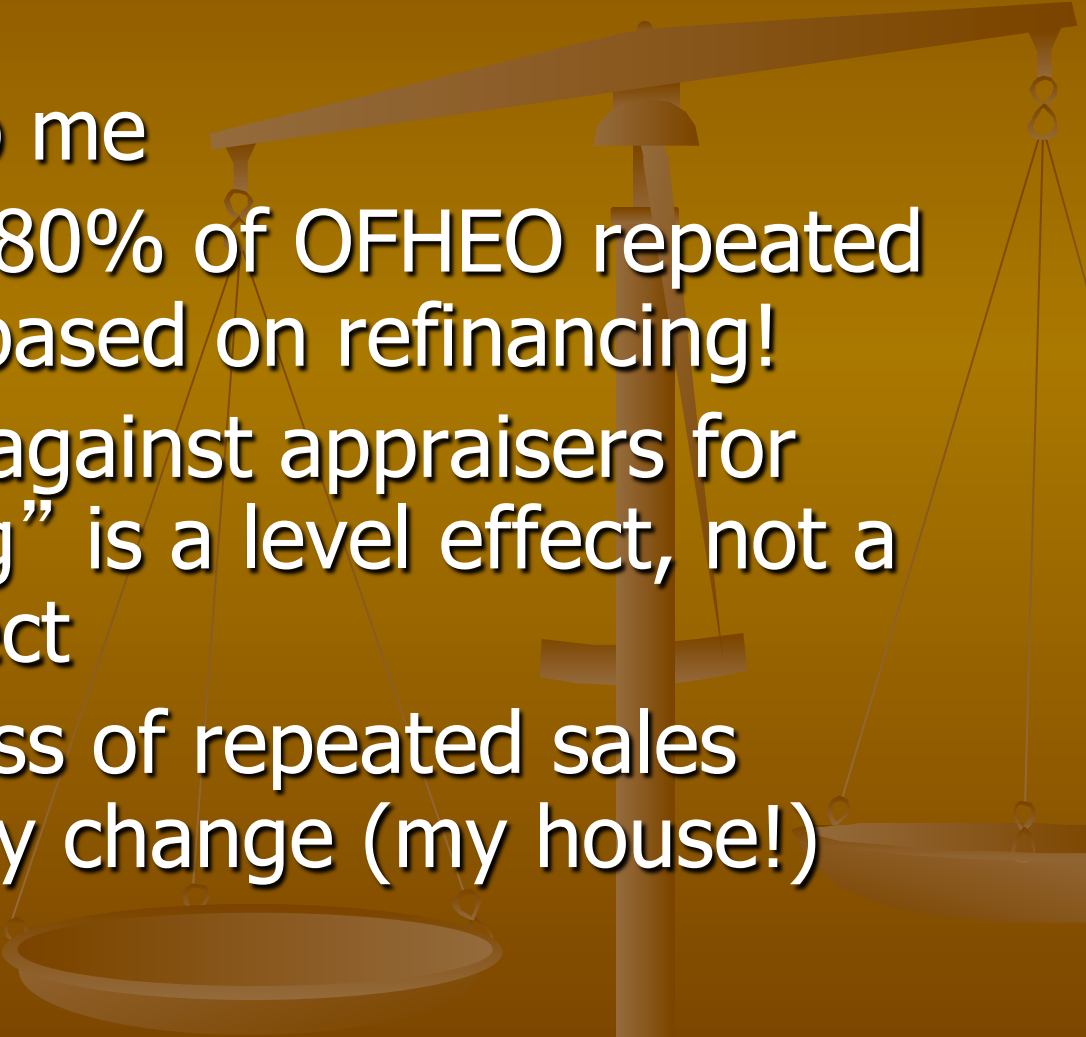
- I' m involved here – the GvG paper is dismissed as showing no bias in the CPI *AFTER 1995!*
- The whole point of our paper was to investigate CPI bias for the entire 20<sup>th</sup> century!
- One of our basic conclusions is that the CPI improved greatly after the 1980s
- Nary a comment about this broader context in PPV
- P. S. you left us out of your reference list



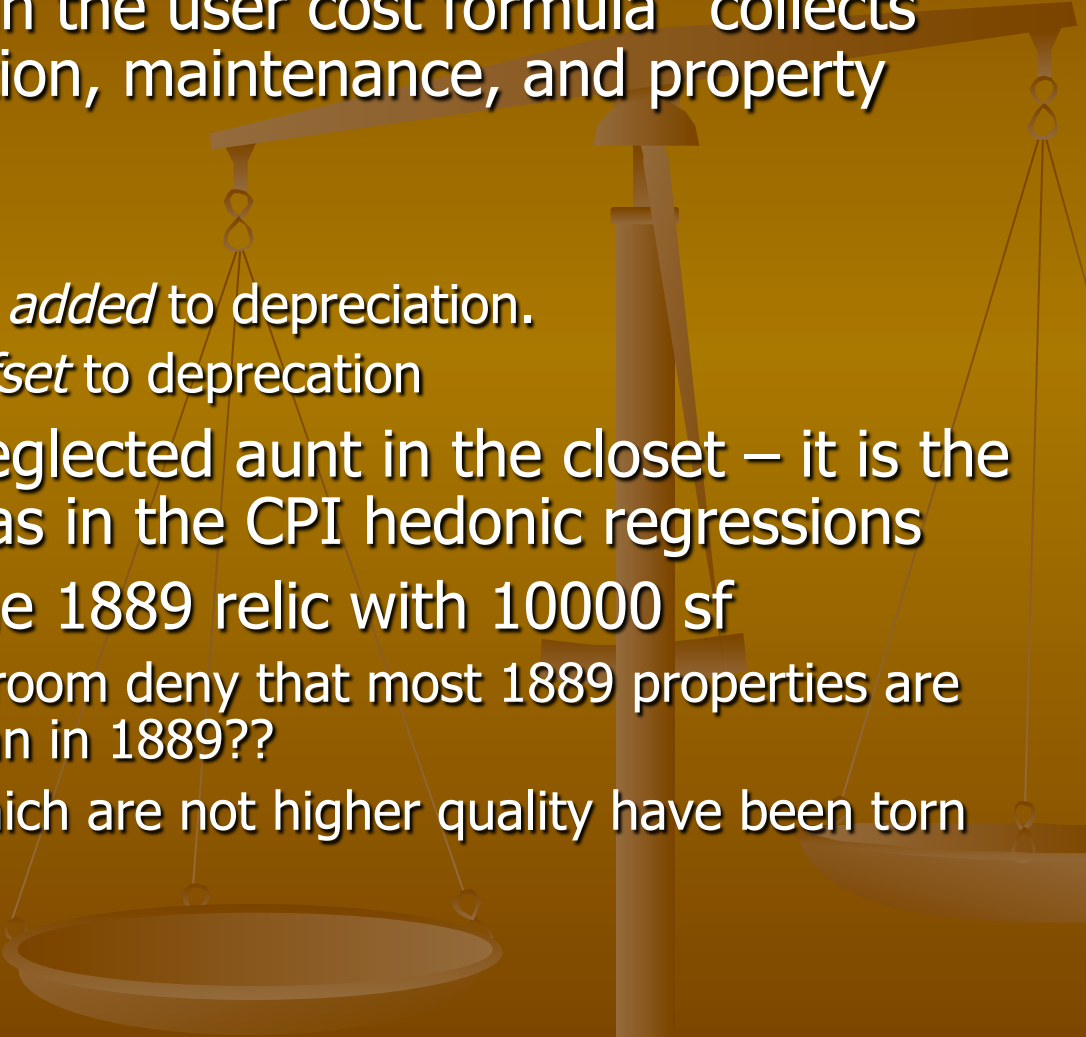
# Big Issues in UC vs. RE

- UC: low interest rates have a negative correlation with housing price inflation
  - This makes UC highly volatile esp. recently
  - UC inappropriate for BEA price deflators because they are driven by capital gains, but you can't calculate UC without a capital gains term
    - But capital gains are excluded from all components of GDP and the deflators!
    - Is my cost of living negative when my stock portfolio doubles? Where's the logical case for including housing CG but not stock market CG??
  - This creates a *prima facie* case that UC measures can't be used in official price deflators
- 

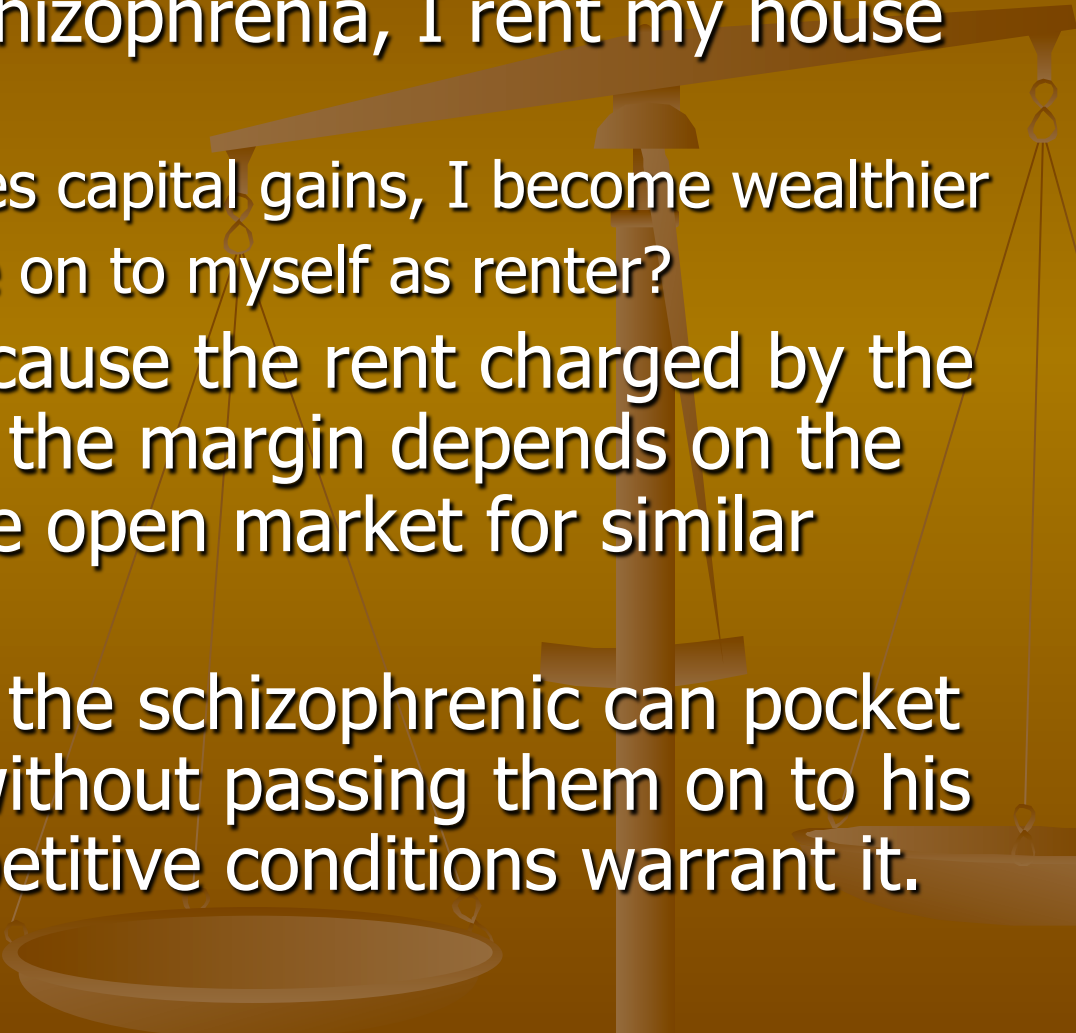
# Thank you for Critique of OFHEO Repeated Sales Indexes

- This was new to me
  - Who knew that 80% of OFHEO repeated sale index was based on refinancing!
  - Any accusation against appraisers for “over-appraising” is a level effect, not a growth rate effect
  - The big weakness of repeated sales indexes is quality change (my house!)
- 

# A technical issue about maintenance and depreciation

- That “gamma” term in the user cost formula “collects the rates of depreciation, maintenance, and property taxes.”
  - What?
    - Maintenance can't be *added* to depreciation.
    - Maintenance is the *offset* to depreciation
  - Maintenance is the neglected aunt in the closet – it is the offset to the aging bias in the CPI hedonic regressions
  - Subjective: saving the 1889 relic with 10000 sf
    - Would anyone in this room deny that most 1889 properties are now higher quality than in 1889??
    - All 1889 properties which are not higher quality have been torn down
- 

# UC confuses real income and real wealth

- Go back to BEA schizophrenia, I rent my house from myself
    - Me as owner makes capital gains, I become wealthier
    - Do I pass all these on to myself as renter?
  - No! Why not. Because the rent charged by the owner-occupier at the margin depends on the rent charged in the open market for similar houses
  - The owner side of the schizophrenic can pocket the capital gains without passing them on to his renter half if competitive conditions warrant it.
- 

# The Landlord Speaks



- Apartment rents are inherently inertial
- Why?
  - Leases are typically for a year – no rental change allowed, no allowance for changing energy costs
  - There is asymmetric info at the beginning, we don't know who will be a good tenant. Once we find one, we want to keep them, so low rent increases for good tenants
  - The concept of “good tenant” is not part of the economics of housing

# Then What Happens?

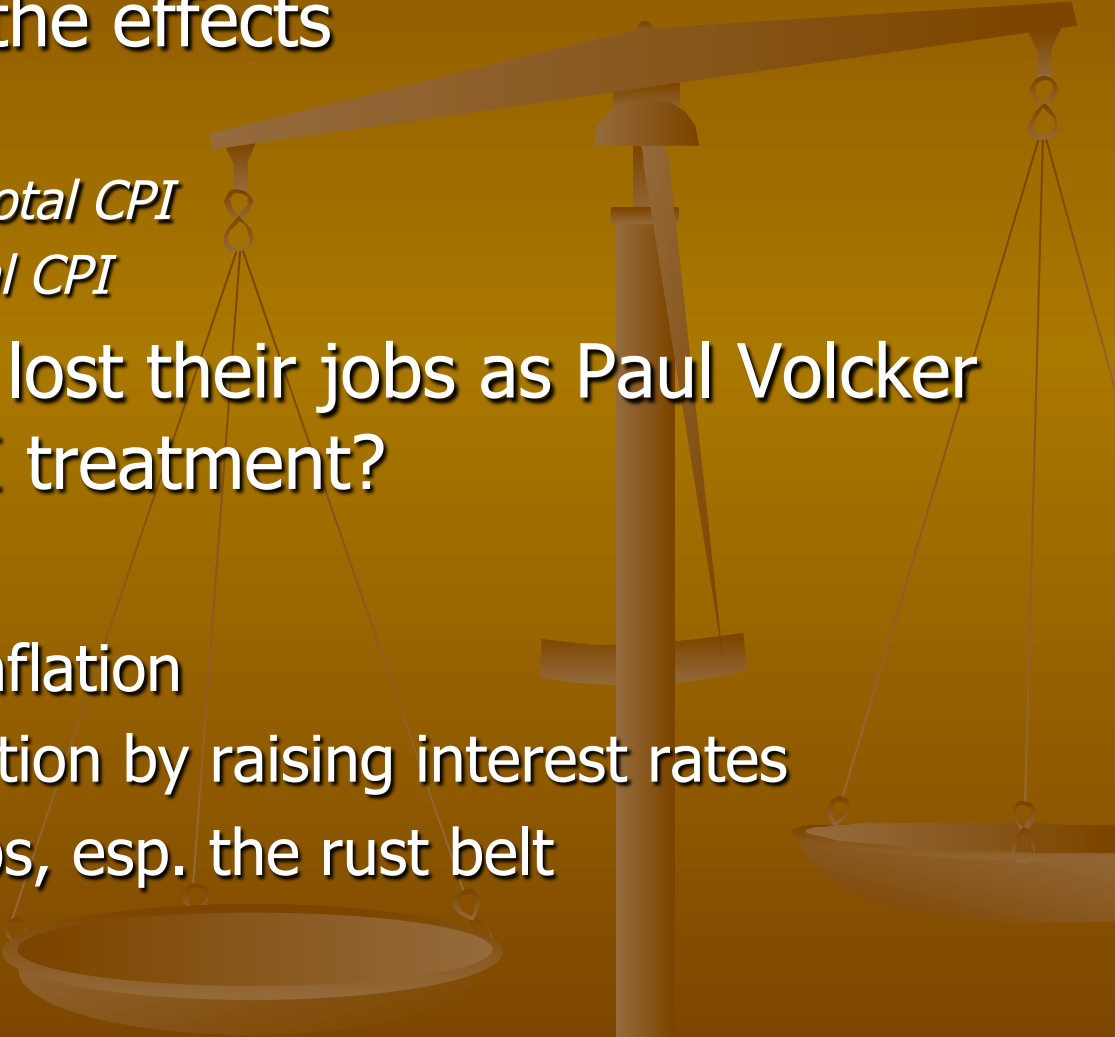
- With bad tenants, you jump the rent, they leave, so it doesn't matter for price indexes
- Once they say they won't renew lease, you then look at the marketplace and decide on the competitive price.
- Sometimes we don't guess right, nobody calls, and we actually reduce the rent, this happened in August 2005

# The Light Touch on pre-1983 CPI



- The PPV paper confuses the issue, makes it sound like pre-1983 CPI was a UC index
- No
  - Multiple flaws
    - Treated mortgage interest payments as a nominal interest rate rather than a real interest rate
    - Calculated mortgage interest expense as if everyone had to get a 1-yr ARM rather than what they actually did, a 30-yr fixed rate.

# The Incredible Effects of CPI Housing Treatment pre-1983

- PPV p. 19 display the effects
    - AAGR ending 9/81
      - Wrong: 11.0 *for total CPI*
      - Right: 9.2 *for total CPI*
  - How many people lost their jobs as Paul Volcker reacted to this CPI treatment?
  - Causation?
    - CPI exaggerates inflation
    - Volcker fights inflation by raising interest rates
    - Everyone loses jobs, esp. the rust belt
- 

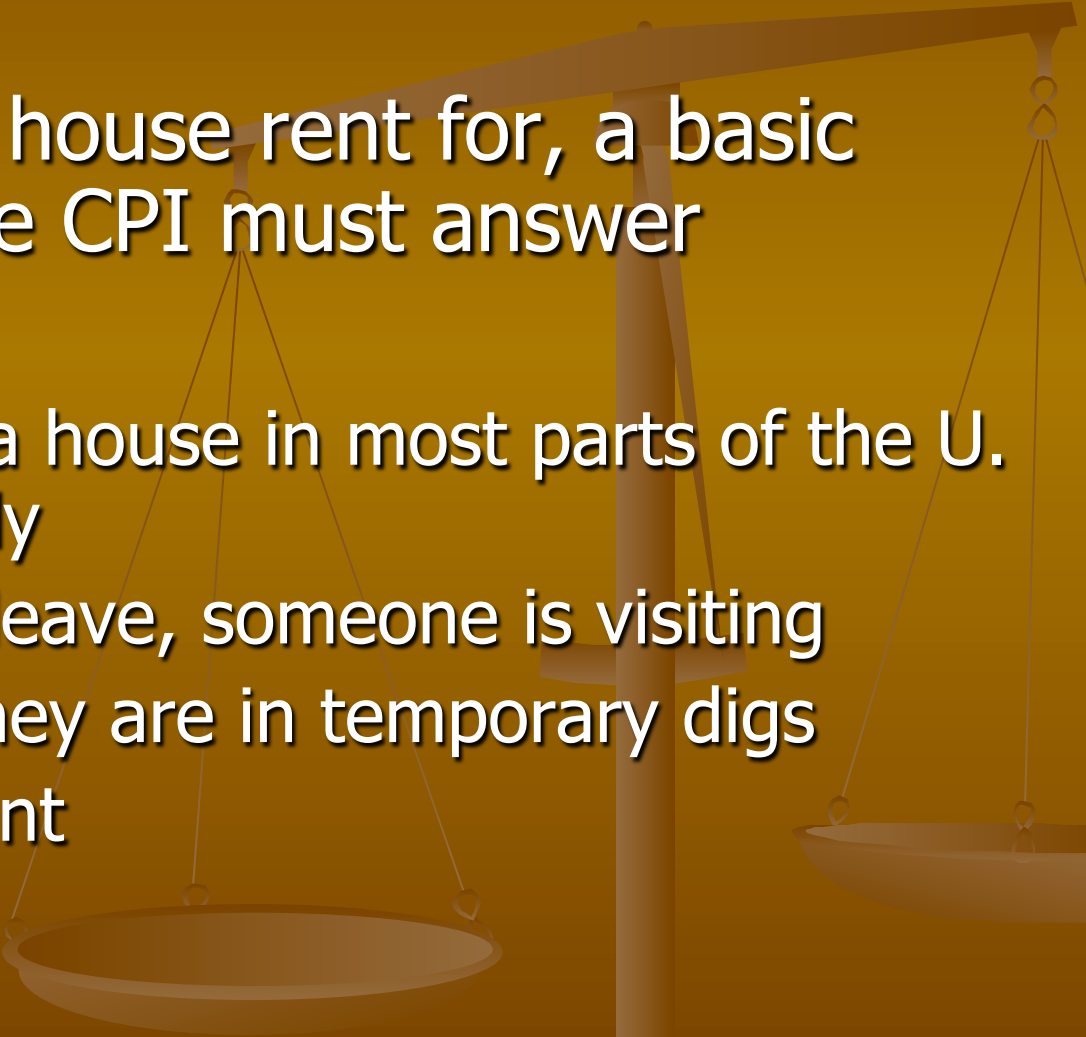


# Interpretation of 0.3 per year Aging Bias

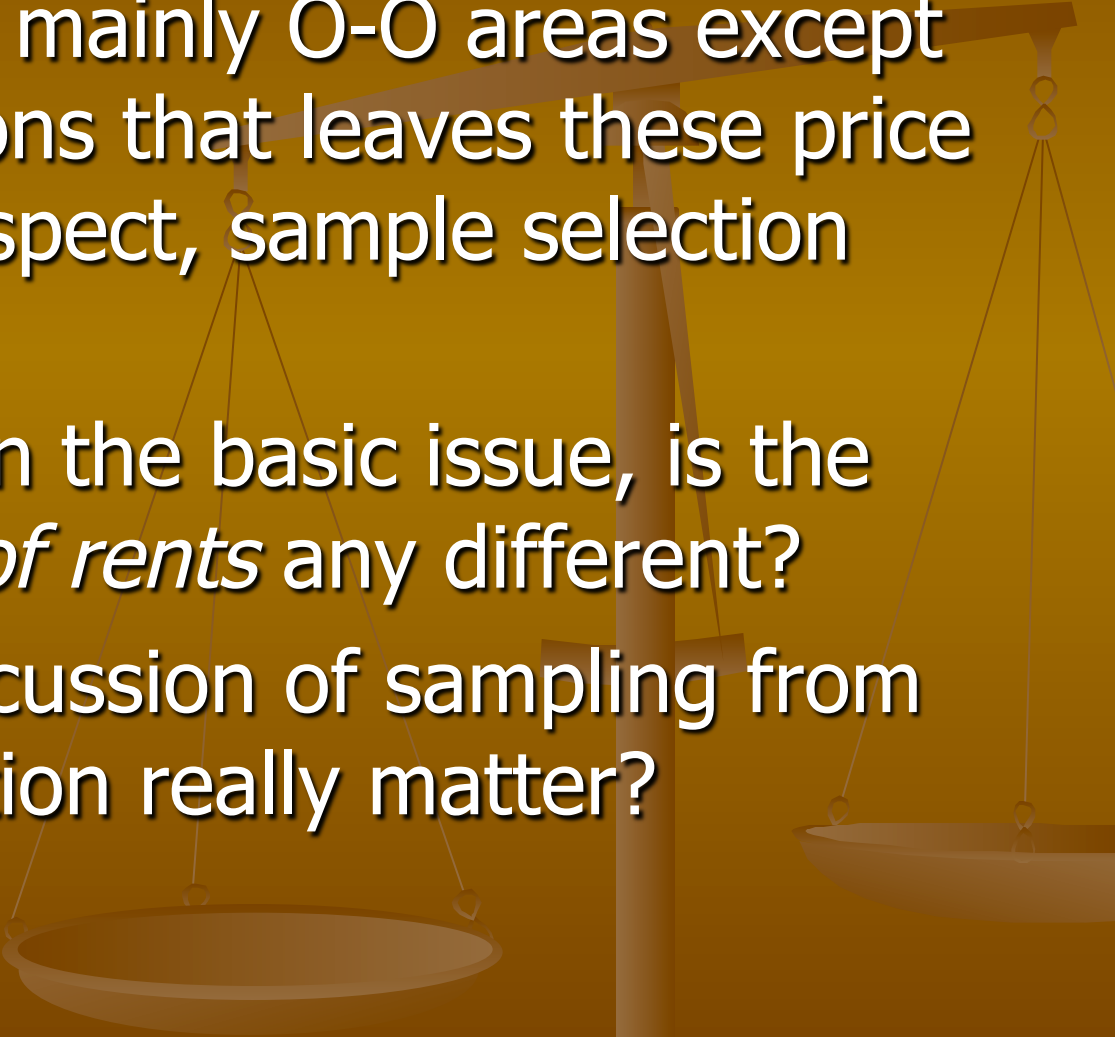
- How have the national accounts integrated aging bias and maintenance.
- Let's imagine that a typical unit declines in value by 0.6% per year with no maintenance
- But maintenance occurs at a rate of +0.3
- CPI comes along and estimates -0.3 aging effect. *Maintenance is behind the scenes.*
- We need integrated maintenance accounts

# Big Issue:

## Incongruity between Apt rent and house rent

- What would my house rent for, a basic question that the CPI must answer
  - Problems
    - Every rental of a house in most parts of the U. S. is an anomaly
    - Someone is on leave, someone is visiting
    - People move, they are in temporary digs
    - My current tenant
- 

# Owner Sample vs,. Rental sample

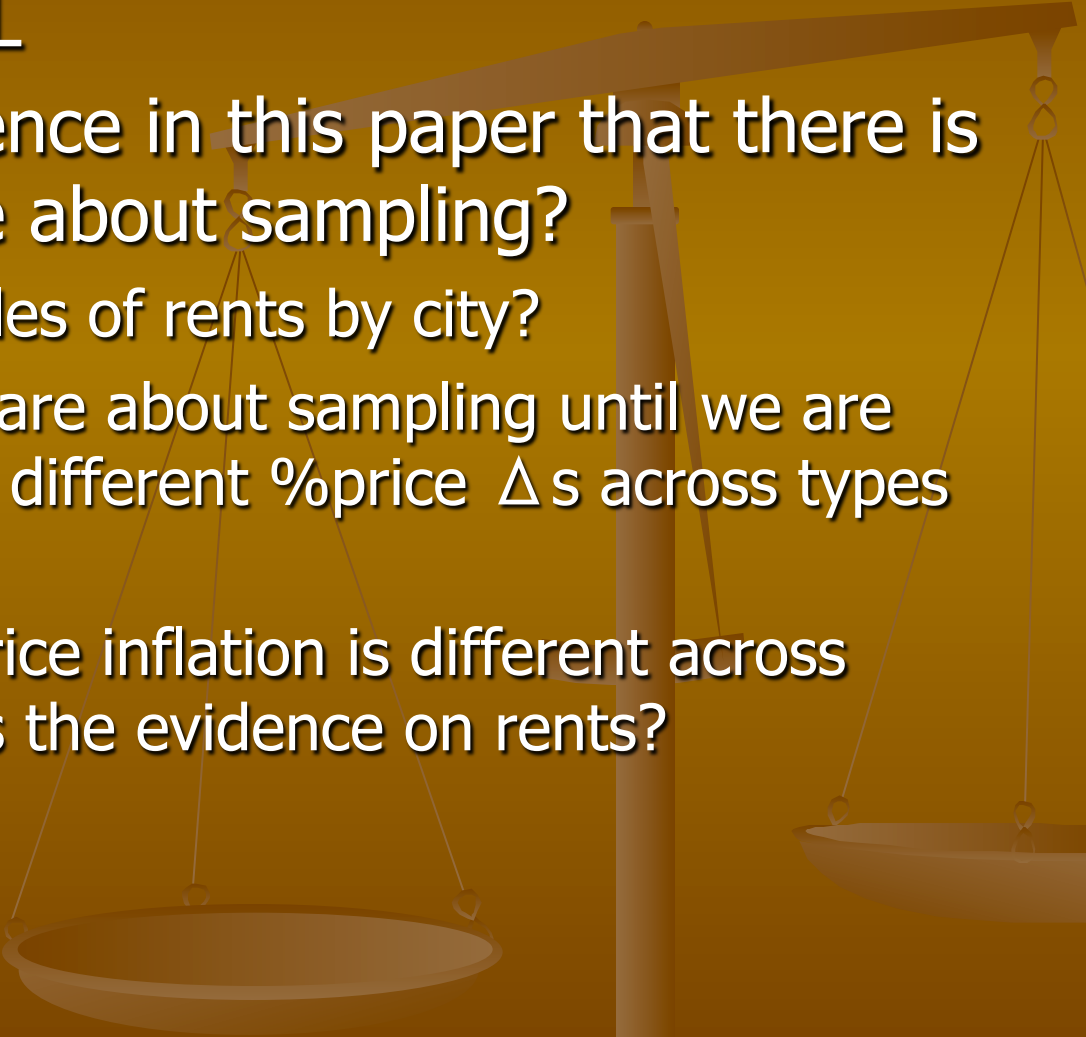
- Nobody rents in mainly O-O areas except for bizarre reasons that leaves these price observations suspect, sample selection bias
  - But this punts on the basic issue, is the *rate of change of rents* any different?
  - Does all this discussion of sampling from the O-O population really matter?
- 

# Methodology: A New Issue



- What to do about utilities subtracted from rent
- Let energy prices accelerate, net rental indexes decline
- Superficially seems like a big problem
- But in a cosmic sense, let energy prices be allocated in an accounting scheme
  - Rent goes down, make sure something else goes up *pari passu*
- A problem for the CPI, but not in principle for the BEA

# Part 3 on Sampling

- These maps of STL
  - Where is the evidence in this paper that there is any reason to care about sampling?
    - Where are the tables of rents by city?
    - P. 29 why do we care about sampling until we are told that there are different %price  $\Delta$ s across types or cities
    - We know house price inflation is different across cities, but where is the evidence on rents?
- 

# Finally, about GvG

- That paper is about a century of house price changes
  - It says there is relatively little difference between the AHS sample and the CPI for 1997-2003
  - That doesn't mean you can disregard everything it says about 1914-1995
  - You fail to link its conclusions to your methodological discussion of 1967-1983
- 